

EXHIBIT A

1. A reinforced hose coupling defining a crimp area of a predetermined longitudinal extent, said reinforced hose coupling comprising:

an inner sleeve having a first end, a second end opposite said first end, and a pair of annular upset beads therebetween, said inner sleeve further having an inner diameter and an outer diameter thereon, said outer diameter having at least one projection thereon;

a hose having an inner diameter positioned over said outer diameter of said inner sleeve, said at least one projection of said inner sleeve interlocking with said hose to resist axial movement of said hose relative to said reinforced hose coupling;

an outer sleeve having a terminating end sandwiched between said pair of annular upset beads of said inner sleeve to prevent axial movement relative to said inner sleeve, said outer sleeve further having an inner diameter circumscribing said hose, said inner diameter of said outer sleeve further including at least one depression therein formed by a crimping operation, said at least one depression defining a crimp area of a predetermined longitudinal extent and interlocking with said hose to further resist axial movement of said hose relative to said reinforced hose coupling; and

at least one reinforcing ring positioned within said inner diameter of said inner sleeve within said predetermined longitudinal extent defined by said crimp area, whereby said at least one reinforcing ring provides localized support along said predetermined longitudinal extent to resist deformation of said inner sleeve during said crimping operation.

2. The reinforced hose coupling according to claim 1, wherein said second end of said inner sleeve is flared.

3. The reinforced hose coupling according to claim 2, wherein said second end of said inner sleeve is received within a second coupling, said second coupling comprising:

a tubular body having an annular upset bead;

a cage axially retained by said annular upset bead; and

a spring disposed within said cage, said second end of said inner sleeve being retained between said cage and said spring of said second coupling.

4. The reinforced hose coupling according to claim 1, wherein said at least one reinforcing ring is made of a rigid material.

5. The reinforced hose coupling according to claim 4, wherein said at least one reinforcing ring is made of steel.

11. A reinforced hose coupling defining a crimp area of a predetermined longitudinal extent, said reinforced hose coupling comprising:

a hose having an outer diameter and an inner diameter;

an outer sleeve having an inner diameter circumscribing said outer diameter of said hose, said outer sleeve further having a plurality of depressions therein, said plurality of depressions defining a crimp area of a predetermined longitudinal extent and interlocking with said hose to resist axial movement of said hose relative to said outer sleeve;

an inner sleeve having an inner diameter and an outer diameter, said inner sleeve being adapted to be inserted into said inner diameter of said hose said

inner sleeve having at least one projection interlocking with said hose to resist axial movement of said hose relative to said inner sleeve; and

at least one reinforcing ring situated within said inner diameter of said inner sleeve, within said predetermined longitudinal extent defined by said crimp area, whereby said at least one reinforcing ring provides localized support along said predetermined longitudinal extent to resist deformation of said inner sleeve.

12. A reinforced hose coupling defining a crimp area of a predetermined longitudinal extent, said reinforced hose coupling comprising:

a hose having an outer diameter and an inner diameter;

an outer sleeve having an inner diameter circumscribing said outer diameter of said hose, said outer sleeve further having at least one depression therein, said at least one depression defining a crimp area of a predetermined longitudinal extent and interlocking with said hose to resist axial movement of said hose relative to said outer sleeve;

an inner sleeve having an inner diameter and an outer diameter, said inner sleeve being adapted to be inserted into said inner diameter of said hose said inner sleeve having at least one projection interlocking with said hose to resist axial movement of said hose relative to said inner sleeve; and

at least one reinforcing ring situated within said inner diameter of said inner sleeve, within said predetermined longitudinal extent defined by said crimp area, whereby said at least one reinforcing ring provides localized support along said predetermined longitudinal extent to resist deformation of said inner sleeve.